

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: POOL POND	Lake Area (ha):	48.16
Town: RINDGE	Maximum depth (m):	4.1
County: Cheshire	Mean depth (m):	2.4
River Basin: Merrimack	Volume (m ³):	1175500
Latitude: 42°46'24" N	Relative depth:	0.5
Longitude: 72°02'14" W	Shore configuration:	1.38
Elevation (ft): 1009	Areal water load (m/yr):	13.41
Shore length (m): 3400	Flushing rate (yr ⁻¹):	5.50
Watershed area (ha): 1113.7	P retention coeff.:	0.52
% watershed ponded: 5.8	Lake type:	natural w/dam

<u>BIOLOGICAL:</u>		2 February 1993	13 July 1992
DOM. PHYTOPLANKTON (% TOTAL)	#1	SYNURA 75%	DINOBYRON 35%
	#2		CERATIUM 20%
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			875
CHLOROPHYLL-A (µg/L)			3.08
DOM. ZOOPLANKTON (% TOTAL)	#1	NAUPLIUS LARVA 43%	NAUPLIUS LARVA 45%
	#2	GASTROPUS 32%	KERATELLA 21%
	#3	KERATELLA 18%	
ROTIFERS/LITER		22	98
MICROCRUSTACEA/LITER		22	150
ZOOPLANKTON ABUNDANCE (#/L)		44	248
VASCULAR PLANT ABUNDANCE			Common/Abun
SECCHI DISK TRANSPARENCY (m)			3.0
BOTTOM DISSOLVED OXYGEN (mg/L)		9.0	7.7
BACTERIA (E. coli, #/100 ml)	#1		< 10
	#2		< 10
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: POOL POND

Town: RINDGE

	2 February 1993		13 July 1992		
DEPTH (m)	1.0	3.0	1.5		3.0
pH (units)	6.1	5.8	6.6		6.7
A.N.C. (Alkalinity)	3.2	4.0	4.2		4.2
NITRATE NITROGEN	0.12	0.07	< 0.02		< 0.02
TOTAL KJELDAHL NITROGEN	0.29	0.42	0.21		0.19
TOTAL PHOSPHORUS	0.008	0.009	0.010		0.009
CONDUCTIVITY (μ mhos/cm)	138.4	144.0			
APPARENT COLOR (cpu)	22	22	21		21
MAGNESIUM			0.75		
CALCIUM			2.9		
SODIUM			19.4		
POTASSIUM			1.10		
CHLORIDE	33	35	34		33
SULFATE	7	6	6		6
TN : TP	51	54	21		21
CALCITE SATURATION INDEX			3.7		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1992

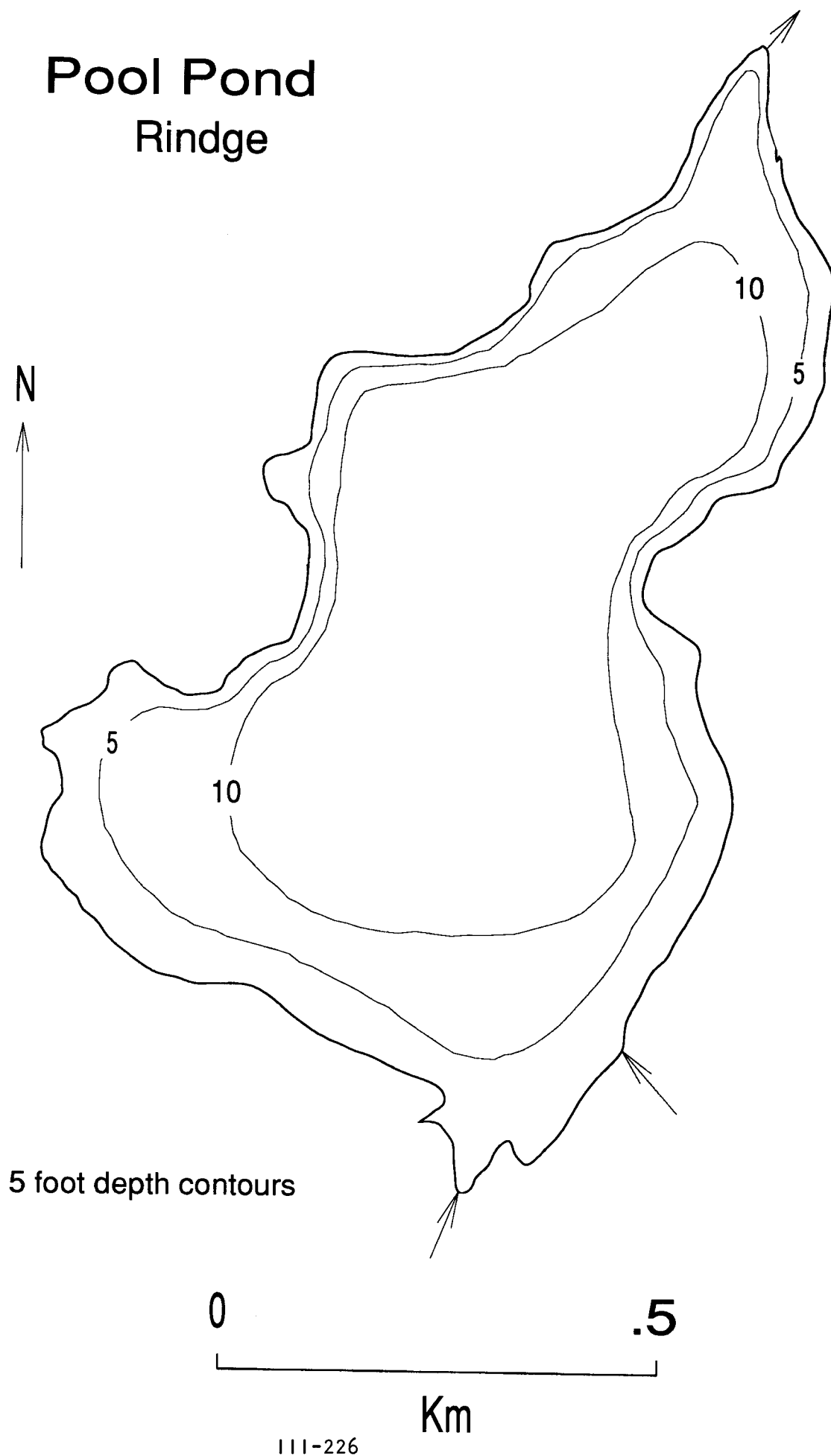
D.O. S.D. PLANT CHL TOTAL CLASS

**	3	4	0	7	Meso.
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COMMENTS:

1. This pond was previously surveyed and classified in 1980. There was little change in water quality and no change in classification.
2. A sheathed filamentous blue-green species (20%) and Aphanocapsa (15%) were the dominant wholewater phytoplankton genera. Blue-greens (50%) and greens (35%) were the dominant classes.

Pool Pond Rindge



FIELD DATA SHEET

LAKE: POOL POND	TOWN: RINDGE
DATE: 07/13/92	WEATHER: OVERCAST

WEATHER: OVERCAST

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SECCHI DISK (m):      3.0          COMMENTS:
BOTTOM DEPTH (m):     4.1
TIME:      1210

*Dissolved oxygen values are in mg/L
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Rindge



